Russian Journal of General Chemistry 1999 vol.69 N12, pages 1906-1911

Electrochemical oxidation of hexaalkyldisilanes

Zhuikov V.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

Electrochemical oxidation of hexaalkyldisilanes in acetonitrile follows the activation mechanism with cleavage of the Si-Si bond in the overall two-electron process. Oxidation of hexamethyldisilane occurs at a potential 1 V more positive than the standard potential of the process. The standard potential of the leaving group Me3Si+/Me3Si is negative and large in value, which determines the activation character of the whole process.